

Appl. No. : 10/069,433  
Filed : May 31, 2002

#### AMENDMENTS TO THE CLAIMS

1. **(Currently amended)** A method for production of proteins folded into their native or active structure, said proteins being from the family of G-protein-coupled receptors, comprising:

providing said a protein from the family of G-protein-coupled receptors solubilized in a first detergent, and

exchanging said first detergent for a second detergent, to induce folding of said protein in its native or active form, wherein said second detergent is selected from the group consisting of:

alkylglycosides, comprising unbranched, branched and or cyclic C5-C12 alkyl chain[,]; and glycoside, comprising selected from the group consisting of monosaccharides and disaccharides; and

alkyl-phosphorylcholine with chain length of C10-C16.

2. **(Previously presented)** The method of Claim 1, wherein said second detergent is provided in a folding buffer with mixed lipid/detergent micelles.

3. **(Previously presented)** The method of Claim 2, wherein said folding buffer contains said second detergent and phospholipid from a natural source.

4. **(Previously presented)** The method of Claim 1, wherein said exchange of detergents is done by a dialysis- or ultrafiltration method.

5. **(Previously presented)** The method of Claim 1, wherein said exchange of detergents is carried out via a chromatographic method.

6. **(Previously presented)** The method of Claim 1, wherein said exchange of detergents is carried out by diluting said solubilized protein in a buffer which contains said second detergent.

7. **(Currently amended)** The method of Claim 1, wherein after said exchange of detergents at least one conserved disulfide bridge is formed in said protein.

8. **(Previously presented)** The method of Claim 1, wherein said folded protein is incorporated in proteoliposomes.

9. **(Currently amended)** The method of Claim 1, wherein said protein is produced in form of as inclusion bodies in a cell line transformed with an expression vector which carries a gene coding for said protein.

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10. **(Previously presented)** The method of Claim 1, wherein said protein is part of a fusion protein and is cleaved off from said fusion protein.

11. **(Currently amended)** The method of Claim 9, further comprising purifying wherein said inclusion bodies ~~are purified~~ and, solubilizing said purified inclusion bodies by adding said first detergent, ~~solubilized~~.

12. **(Previously presented)** The method of Claim 1, wherein said first detergent is selected from the group N-Lauroylsarcosine, dodecylsulfate, other charged detergents or urea or guanidiniumchloride in combination with charged or uncharged detergents.

13. **(Previously presented)** The method of Claim 1, wherein said second detergent has a concentration that is above its critical miceller concentration.

14. **(Previously presented)** The method of Claim 1, wherein said second detergent is alkyl-phosphorylcholine with a chain length of C10-C16.

15. **Canceled**

16. **Canceled**

17. **(Previously presented)** The method of Claim 3, wherein said phospholipid is a lipid extract of tissue in which said protein occurs naturally.

18. **(Previously presented)** The method of Claim 7, where the disulfide bridge is formed by adding a mixture of oxidized and reduced glutathione.

19. **(Previously presented)** The method of Claim 11, wherein said second detergent is alkyl-phosphorylcholine with a chain length of C10-C16.

20. **(Previously presented)** The method of Claim 12, wherein said second detergent is alkyl-phosphorylcholine with a chain length of C10-C16.

21. **(Previously presented)** The method of Claim 13, wherein said second detergent is alkyl-phosphorylcholine with a chain length of C10-C16.